

Title (en)

MULTICAST CONTAINMENT IN A MULTIPLE PRE-SHARED KEY (PSK) WIRELESS LOCAL AREA NETWORK (WLAN)

Title (de)

MULTICAST-EINGRENZUNG IN EINEM DRAHTLOSEN LOKALEN NETZWERK (WLAN) MIT MEHREREN IM VORAUS GETEILTEN SCHLÜSSELN (PSK)

Title (fr)

CONFINEMENT DE MULTIDIFFUSION DANS UN RÉSEAU LOCAL SANS FIL (WLAN) À CLÉ PRÉ-PARTAGÉE (PSK) MULTIPLE

Publication

**EP 4278635 A1 20231122 (EN)**

Application

**EP 22702102 A 20220111**

Priority

- US 202117147319 A 20210112
- US 2022012013 W 20220111

Abstract (en)

[origin: US2022225097A1] A method for providing multicast frames in a Multi-Dwelling Unit (MDU) is provided herein. An Access Point (AP) can receive a join request from a first client device. The AP can generate a Group Master Key (GMK) from the Pre-Shared Key (PSK) associated with a Basic Service Set (BSS) that includes the first client device. The AP can then derive a Group Transient Key (GTK) from the GMK. The AP may then send the GTK to the first client device. Thereinafter, the AP can send multicast frames to the first client device encrypted by the GTK. The first client device can decrypt the multicast frames with the GTK. However, a second client device, that does not share the PSK, may receive the multicast frame but cannot decrypt the multicast frames.

IPC 8 full level

**H04W 12/041** (2021.01); **H04W 12/06** (2021.01); **H04W 12/069** (2021.01)

CPC (source: EP US)

**H04L 63/0428** (2013.01 - EP); **H04W 12/033** (2021.01 - US); **H04W 12/041** (2021.01 - EP US); **H04W 12/06** (2013.01 - EP); **H04W 12/069** (2021.01 - EP US); **H04W 12/71** (2021.01 - US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA ME

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KH MA MD TN

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**US 11665544 B2 20230530**; **US 2022225097 A1 20220714**; CN 116982331 A 20231031; EP 4278635 A1 20231122; US 12069478 B2 20240820; US 2023308876 A1 20230928; WO 2022155145 A1 20220721

DOCDB simple family (application)

**US 202117147319 A 20210112**; CN 202280020463 A 20220111; EP 22702102 A 20220111; US 2022012013 W 20220111; US 202318325288 A 20230530